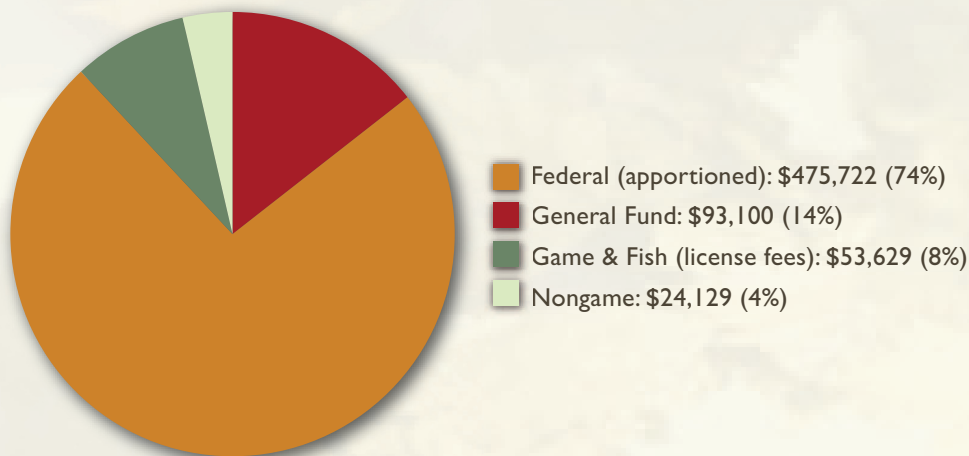




Threatened and Endangered Species

Threatened and Endangered Species Expenditures by Fund Source



The Wildlife Division invested:

- 1,007 hours on threatened and endangered (T&E) species reviews;
- 235 hours on the piping plover project;
- 207 hours on the Mitchell's satyr habitat conservation plan;
- 137 hours on reviewing the state list of T&E species; and
- 32 hours on T&E species training.

The Wildlife Division also:

- Conducted a total of 2,368 T&E environmental reviews, 476 of which determined that the projects have potential impacts; and
- Issued or modified 110 T&E permits.

The DNR has the statutory authority to protect state-listed threatened and endangered species, and the Wildlife Division reviews activities that could affect state-listed threatened or endangered species. Review of activities includes division staff, as well as consultation with the Michigan Natural Features Inventory (MNFI), which specializes in "at risk" species. Organizations use this expertise and the recommendations resulting from these reviews to modify their activities or project designs to limit impacts to rare species. Examples of organizations implementing these changes include repairs to the University of Michigan bell tower to minimize impacts to nesting peregrine falcons; restoration of oak savannas for Karner Blue butterflies, turkeys and other species; cleaning of threatened spotted turtles in the Marshall oil spill; and allowing transplant of threatened plants where a road was being built.

Other DNR staff members also use that expertise in endangered species when developing strategic and operational plans for species and habitats. The Wildlife Division periodically reviews the state list of threatened and endangered species and issues take permits for state-listed species. Currently, more than 400 species of plants and animals are listed as threatened or endangered in Michigan.

Karner Blue Butterflies

Karner blue caterpillars eat only wild lupine, a wildflower that thrives only with repeated habitat disturbance, such as through fire or mowing. Habitat work designed to enhance Karner populations could kill a few butterflies, and killing a federally listed endangered species is not allowed without a federal permit. The Wildlife Division completed a habitat conservation plan (HCP) for this species that allows necessary habitat work to occur unhindered during the 20-year duration of the plan. The HCP also allows the division to compete for federal funds for endangered species land acquisition, which could result in more land in state game areas (primarily in southern Michigan) where the butterfly lives. With the HCP, the DNR can expand its habitat manipulation on state game areas and increase work with private landowners. A similar HCP is in development for Mitchell's satyr butterflies.

Piping Plover

After several years of population growth, the Great Lakes population of piping plovers – a small shorebird that nests on beaches along Lakes Michigan and Superior – was down somewhat in 2010. The 60 nesting pairs observed was short of the record 71 pairs in 2009, but still far above the low of 12 pairs in 1986. In 2010, the DNR funded nest protection, monitored pairs regularly and rescued eggs when necessary. Rescued eggs were hatched in a captive rearing facility, and 14 young plovers were later released. The department also funded research on adult survival by banding chicks and adults. The piping plover population continues to be threatened by off-leash dogs and scavengers attracted to beaches by litter.

Wolves

Michigan, along with Minnesota, Wisconsin and Safari Club International, has continued to pressure the federal U.S. Fish and Wildlife Service (USFWS) to return wolf management to the states. The USFWS plans to delist wolves in the Great Lakes by the end of 2011. To assist the public, the Wildlife Division continues to monitor the wolf population and advises people on how to address wolf/human conflicts. Division staff also attended a national workshop to set a national agenda for wolf recovery.

The wolf population has been growing for 20 years, but was estimated to be 557 in 2010, which is slightly lower than the previous year. The growth rate has been decelerating for the past decade, but several more years of data will be needed to establish where the population will stabilize. A pack of wolves was documented in the Lower Peninsula, where research suggests there is habitat for wolves, in 2010. Significantly more depredation complaints are anticipated because of the greater number of farms in the Lower Peninsula. Recent studies suggest there are two species of wolf in Michigan: the gray wolf (*Canis lupus*) and eastern wolf (*Canis lycaon*) and their hybrids.

Climate-Change Adaptation

Climate has a huge impact on our state's natural resources. The Wildlife Division is developing a climate-change adaptation framework under the Wildlife Action Plan (a strategy developed by the conservation community to help prevent Michigan's wildlife from becoming endangered). The framework outlines how fish and wildlife may react to climate changes, and how to make management more resilient to a changing climate. Michigan has secured a \$360,000 federal grant to adjust climate-change predictions for lake-effect weather conditions. Michigan has signed a memorandum of understanding with Wisconsin to share climate information and collaborate on projects.